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RADIO LISTENING AND SOCIO-ECONOMIC STATUS*

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Surveys of radio listening are developed for the primary purpose of ascertaining information about the listener. Instigators of these surveys are usually interested in the listeners' habits as they apply to radio listening and buying, in his attitudes toward certain types of broadcasting, including educational, commercial, and entertainment programs, and in his likes and dislikes concerning certain general policies and the more or less personal aspects of radio programming. Since most of these surveys have been conducted for commercial purposes, the information desired is usually an answer to the question of the extent to which radio advertising has led the listener to the purchase of certain commodities. In addition to these interests there is a growing tendency to attempt to determine other aspects of the behavior of the listening audience. Even commercial surveys at the present time are in many cases directed toward a measurement of attitudes towards certain types of programs, such as those intended for children, purely political broadcasts, etc. Since many of these characteristics of the behavior of the listener require a knowledge of psychological principles and an application of sound scientific procedures, psychologists and sociologists are with increasing frequency becoming interested in the problems which this new medium of communication has uncovered.

Of particular interest to the psychologist are investigations which help answer such questions as: Is the type of program preferred by children related in any way to that preferred by the parents? Is the socio-economic status of the head of the family related to the program preferences of any of the members of the family? What are the differences between the types of programs preferred by different members of the family? What types of programs are listened to at different periods of the day? What are the attitudes of the parents toward children's programs? Many other questions of psychological importance are arising continuously as the result of the continued use of radio as a medium for entertainment, education, and the dissemination of propaganda.

This paper will present a preliminary summary of the answers in 10,000 questionnaires distributed throughout the state of Minnesota. From this summary it is hoped that some suggestions per-

* Manuscript recommended for publication by Dr. B. F. Skinner.

tinent to the answer of some of the questions raised above may be reached. The summary will also raise some questions relative to methodology in this type of survey, with a view to their being answered at a later time.

THE QUESTIONNAIRE

The first page of the questionnaire bore the title "Radio Survey of the Minnesota Congress of the Parent-Teachers, Inc." Space was provided on this page for the name of the city in which the respondent lived and the name of the council (school) to which the parent belonged.

The questionnaire was three pages long and asked the following 14 questions. (1) Which radio station do you listen to most (all around the clock)? Questions (2) through (7) asked for the programs listened to at certain periods of the day. These periods were: 6:30 a. m. to 9:00 a. m., 9:00 a. m. to noon, noon to 1:30 p. m., 1:30 p. m. to 6:00 p. m., 6:00 p. m. to 9:00 p. m., and after 9:00 p. m. Space was provided in each question for six to eight answers. (8) Now that you have listed the stations and programs to which you listen by periods of the day, will you please list below all the stations to which you listen regularly in the order of your preference? (9) The average amount of time our radio is in use each day is----. (10) In our family there are: ---- men (over 21); ---- women (over 21); ---- young people (16-21); ---- children (under 16). (11) If there are children in your home, to what programs do they generally listen? (12) We bought our radio (month and year). (13) The occupation of the head of the family is ----. (14) The five programs on the air that you like best (or liked best if you no longer hear them) are: (Husband), (wife—daytime), (wife—night time).

It may be seen that the questionnaire was of the unaided recall type. It is not necessary here to go into the relative advantages and disadvantages of the various type of questionnaires. It must be remembered throughout the following summary, however, that this type of questionnaire may facilitate memory distortions. That these distortions are not particularly significant in the present instance will become apparent later when the replies to the questions covering periods of the day are compared with the 'round the clock preferences. It was believed that the inclusion of both types of question would help to safeguard against important omissions. The analysis of the answers to the questions covering the listening periods in terms of husband, wife and children preferences will also aid in de-

termining the part played by each of these three elements of the family in deciding to which program the radio is tuned at various periods of the day.

Questions (1) and (8) which relate to station preferences were included to determine coverage of certain stations in case intercommunity differences occurred which could be accounted for in terms of the stations most regularly listened to. These questions also demonstrate the similarities and differences of the results from these two ways of asking the station-preference question.

Questions (2) through (7) also contained spaces for the respondent to note the stations listened to during the periods of the day corresponding to each of these questions. Due to an unfortunate and untested last minute change in the wording of this part of the questions, however, the replies are worthless. The second part of each of these questions was quite separate and related only to programs heard.

Although no figures are available, the estimates of those who distributed and collected the questionnaires indicate that the average length of time that the questionnaires were in the hands of the respondents was from one to three days. Some were returned the day after they were received. All of the questionnaires were returned within one week of the day on which they were distributed, although very few were kept longer than three days.

THE SAMPLE

The Minnesota Congress of the Parent-Teachers, Inc. was made aware of the purpose of the survey and agreed to take charge of the distribution and collection of the questionnaire. Because of the magnitude of the task, it was necessary to delegate the actual allocation and distribution to local radio-committee members. It was originally intended that each community sampled should receive a number of questionnaires proportionate to its population, and this plan was rather closely adhered to in the case of Minneapolis, St. Paul and Duluth. The enthusiasm of the local Parent-Teachers groups varied so widely, however, that it was impossible to control carefully the number of questionnaires distributed and the number of completed questionnaires returned. Rather than reduce the size of the sample by the amount that would be necessary to carry out the smallest proportionate return it was decided to include all of the replies in this preliminary report. Table I lists the returns from the communities sampled. The map in Figure 1 indicates the location

of these communities. The figures in this map show the percentage of the sample coming from each area. The concentration of the communities sampled closely approximates the concentration of the total population in the state.

A few of the questionnaires were distributed during the last two weeks of December, 1936. The majority were given out during the first weeks of January, 1937. All the completed questionnaires were returned by the end of January.

Table II shows how the sample compares with a standard sample based upon an occupational classification used at the University of Minnesota. This scale is a modification and combination of those devised by Taussig (industrial classifications) and by Barr (intelligence). It has been previously used in several sampling studies.¹ The groups in this occupational classification include:

- Group I—Professional: Doctors, lawyers, professors, etc.
- Group II—Semi-professional and Managerial: School teachers, major business, etc.
- Group III—Clerical: Skilled trades and retail business.
- Group IV—Farmers: Owners and renters (not including day laborers).
- Group V—Semi-skilled occupations: Minor clerical positions and minor business.
- Group VI—Slightly skilled trades and other occupations requiring little training or ability.
- Group VII—Day laborers of all classes.

The chief advantage of the above classification is that it is functional in character; it is a grouping based upon what the worker does rather than upon the name of his job. It reflects a number of factors which go to make up an individual's occupational status. Among these are included his ability, training and position in a very rough approximation of a socio-economic scale. Social status is probably more accurately reflected by the above grouping than is income level. An attempt to combine the two into one scale must immediately en-

¹ Barr, F. E., A scale for measuring mental ability in vocations and some of its applications. M. A. Thesis, Stanford University, 1918. Taussig, F. W., Principle of Economics, 2nd rev. ed., New York, The Macmillan Co., 1920, 2 vols. See esp. Vol. II, pp. 134-137. The Minnesota revision of these two scales is described in Goodenough, F. L., and Anderson, J. E., Experimental Child Study, New York, The Century Co., 1931, pp. 236f, 451, and App. A. A major study in which the Minnesota scale was used with satisfactory results is contained in Anderson, J. E., ed., The Young Child in the Home (a White House Conference study), New York, D. Appleton-Century Co., 1936.

counter the wide variation of income typical of each group. Although more valid scales are now in the process of development and standardization, the Minnesota scale has been and still is a considerably more satisfactory classificatory scheme than are any of those which depend solely upon the name of a position to determine its place in a scale.

It is clear from Table II that our sample is loaded rather heavily in the direction of the professional and semi-professional groups. This has also been true of other sampling studies.² There are several factors contributing to this disproportionate representation. One is the method of sampling. The questionnaires were distributed by committee members of local Parent-Teachers groups. The actual distribution was accomplished in three ways: The blanks were distributed and filled out during a meeting of the local group; they were distributed through the children at school; and or they were distributed by members who canvassed local communities. The latter method of distribution accounts for the fact that our sample contains replies from families in which there are no children. Another factor accounting for the loading of the sample may lie in the incidence of illiteracy among the various groups in the scale. Some of the handwriting on the completed questionnaires was all but illegible, and, since most of these came from members of Groups VI and VII, we may suppose that inability to write may have been a cause of the small number of returns from the lower groups. This would seem a more logical assumption to account for the low percentage of returns than that there is proportionately less radio listening in these levels. Surveys of radio ownership show a smaller percentage of ownership in homes in the lower income levels, but none of them indicates that the percentage of ownership is proportionately as low as the representation of these groups in our sample. Still another cause of the overloading in the upper groups may be traced to a difference in their attitude toward such surveys. It may be true that parents in these groups are more actively interested in expressing their likes and dislikes with respect to radio entertainment and adver-

² Starch, Daniel, Revised Study of Radio Broadcasting, New York, National Broadcasting Co., 1930. A similar trend in the return of mailed questionnaires occurs in Kirkpatrick, Clifford, Attitudes and Habits of Radio Listeners, St. Paul, Webb Book Co., 1933. In the latter case, although approximately 8% of the returned questionnaires come from Group I (as in the present study), an attempt is made by a process of averaging to show that this disproportionate return does not bias the sample. Occupational groups, however, cannot be added and divided by the number of returns any more than room numbers can be added and divided by the number of rooms to find the number of the average room.

tising. The writer understands that investigations are now under way to determine the incidence of such attitudes. Our *a priori* reasoning must await the outcome of these investigations for validation. Again it would have been possible to make our sample adhere more rigidly to the proportions of the standard sample with respect to the various occupations represented. This would have necessitated cutting our sample to about one-tenth (1200 cases) of its present size. It is questionable whether interpretations based upon this many cases would be either valid or reliable.

Table II also shows that our sample is almost entirely lacking in representation from Group IV (Farmers). This means that none of the conclusions based upon this study may apply to this occupational group unless, of course, it can be demonstrated that this group resembles the others in enough respects to make any of the conclusions valid.

In Table III are tabulated the size-of-family characteristics for the Minneapolis sample. A comparison of these figures with those of Anderson et al shows that our sample is fairly representative in this respect. It should be noted that the mean number of children under 16 years of age increases gradually from Group I to Group VII in the occupational scale. Group V presents the one exception to this trend. The difference between the mean number of children in Groups I and VII is statistically significant ($C.R.=3.33$), although other inter-group comparisons do not yield statistically valid differences. It must be remembered, however, that the combination of the trend and the statistically significant difference between the extremes indicate that this variable may have to be taken into consideration in the interpretation of the results to be presented later. Other differences in the means in Table III are neither sufficiently consistent nor significant enough to warrant serious consideration.

Our sample, then, is admittedly unbalanced regarding occupational representation. It should also be pointed out that it is a "spot" sampling of the state. It is restricted to a few cities and towns which in turn are grouped to represent geographic areas. If results for the total sample are to be claimed to be typical for the state as a whole, the assumption is made that the communities sampled are representative of the state in the particular respect to which a given interpretation of the data applies. Such an assumption may not be justified, although there is no evidence available to the writer that a lack of correspondence in station and program preferences between this sample and the state as a whole exists. The effect of

adding to this sample a proportionate number of the members of occupational Group IV can only be guessed.

The above discussion of the characteristics of the sample points to the following precautions which must be observed in the interpretation of the results of the survey:

(1) The sample is loaded in the direction of the professional and semi-professional occupational groups. It cannot be considered as representative of the population as a whole unless it can be demonstrated that this overloading does not make the sample atypical in the respect with which a given interpretation of the data is concerned.

(2) The sample is lacking in representation from those whose occupation is farming.

(3) Occupational differences in program preferences may require attenuation for the effect that may be expected from the trend in family size.

TREATMENT OF THE DATA

The replies were coded and punched into Hollerith cards. There were three cards for each questionnaire, the first twenty fields in each card carrying the same information. This information consisted of the answers to Questions (1), (8), (9), (10), and (13). In coding and punching the replies, it was found that some of the respondents gave more information than ruled spaces in the questionnaire had allowed for. It thus proved necessary to plan for extra fields on the cards to provide for this added information. The exact amount of additional information is indicated in Table IV. This table shows the number and percentage of respondents who mentioned one program or more. The entry under the largest number of programs mentioned in each question refers to the number of people mentioning the corresponding number of programs *or more*. Thus, in Question (2), 81 people mentioned seven or more programs, but the seventh program mentioned was included in the present tabulation. The percentages with these entries under the largest number of programs mentioned for each question do not express the amount of information not tabulated. As a matter of fact, the amount of information not tabulated was considerably smaller than these percentages would indicate. The number of fields on the card assigned to each question was assigned as the result of a preliminary tabulation of 300 questionnaires selected at random from the total sample. On a basis of this tabulation of the number of

programs mentioned in reply to each question a decision concerning the number of replies to include in this study was made. This preliminary tabulation shows that the number of mentions included in this study omits less than 2% of the total number of programs mentioned.

The question immediately arises as to how many of the programs mentioned must be included in order that the results of the present study be duplicated. The answer to this question is now in the process of being determined. From personal contact with every step in the tabulation of the results of the present study, it is the writer's belief that tabulation of the first three of the programs mentioned in some questions and of the first one or two mentioned in others would have given results that compared very favorably with the longer and more expensive method of tabulating over 98% of the programs mentioned. It is conceivable that more mentions should be taken into account in the case of radio programs than in the case of, for instance, commodities such as toothpaste. Franken and Hitchkiss showed that, with such commodities, and with the subject listing the first ten brands he thinks of, rank order was not appreciably disturbed, whether it was determined by tabulating the total number of mentions, or the brand mentioned first, or assigning scale values. A possible exception occurred in the lower ranks where the original rank order as well as the inversion was not statistically reliable. Brand familiarity and radio listening habits are admittedly two different phenomena, although it may be argued that certain principles of learning are common to both. The writer is certain that a tabulation of the first program mentioned in each question would not have produced results that correlated satisfactorily with a tabulation of all the programs mentioned. On the other hand, a tabulation of the first three or four of the programs mentioned might conceivably be more sound psychologically than the inclusion of every program that a person may think of as associated with a particular time of day. This question needs further study.

To be made available for tabulation by Hollerith equipment, all written answers must be coded into numerical forms. This operation was done in the present study by selected individuals who were first made aware of the nature of the study and carefully instructed in the procedures to be followed. Three basic codes were used: one for the questions relating to the morning listening (including the part of Question (14) dealing with the "Wife—daytime" listening); one for those questions referring to afternoon listening and children's

preferences; and one for the evening listening (including the "Husband" and "Wife—night time" parts of Question 14). A separate code was set up each time a program was mentioned either by name of star, program, sponsor, or product advertised. This technique was followed in order to determine the usual manner in which radio programs are remembered.

Both coding and punching were carefully verified during the early part of these operations. Later, when the code had been learned, verifying was done on samples of 300 cards selected at random. The error in coding thus determined was 2.8%. Since the errors were corrected as they were discovered, the coding error for the total sample is probably less than the above percentage, although we have considered it as our coding error. Punching errors were never higher than .2% and were usually considerably lower than this figure. Punching errors were also corrected as they were discovered. The low punching error is undoubtedly due to the rather complete coding that was performed. It was not necessary for the punch operator to do any coding. The errors described above are considerably lower than the average expected in these operations. This may be partly due to the fact that the operators were working by the hour and were instructed to work for accuracy rather than for speed. As a result, the data show a tendency toward over-coding, i. e., a given program may occur under as many as five or six different codes, depending upon the number of different days it was mentioned. This procedure slowed up the tabulation somewhat but made sure that errors in tabulation due to confusion of names were reduced to an absolute minimum.

To be given an individual code, a program had to be mentioned on three separate questionnaires. Thus each program appearing in the summary was mentioned at least four times. This arbitrary standard was found to be necessary to prevent the code from becoming unwieldy and to prevent names occurring in the code which were not names of programs at all but, rather, were names of newspaper comic strips, serial novels, etc.

The answers to Question (13) (occupation of head of family) were coded by one person. This individual was a graduate student in psychology who, although he had had no previous experience with the occupational scale used in this study, possessed a considerable background in the use of similar scales. As a check on the consistency of his coding, 130 questionnaires which were coded first, were re-coded after the entire sample of 10,000 had been completed. There

were two disagreements which constitute an error of reliability of about 1.5%. Since the use of this code requires the exercise of considerable judgment on the part of the person doing the coding, these same 130 questionnaires were coded by another graduate student who was also conversant with the use of similar occupational codes. Four discrepancies in judgment appeared between these two coders. This constitutes an "error" of about 3.1%. We may thus conclude that our error in the occupational coding is between four and five per cent. Conclusions concerning occupational differences in the data to be presented must take this error into account. Although the size of this error means that from 400 to 500 questionnaires of the total sample were perhaps miscoded with respect to the occupational scale used, it should be pointed out that the discrepancies between the coders working with the test sample never involved a difference of more than one step in the scale. Since the disagreements were not always in the same direction, they would tend to cancel each other. The greatest source of error in the treatment of any question which asks for an individual to state his occupation probably occurs in the name that each person gives to his own job and the ambiguity, sometimes intentional, of that name to another person. Such ambiguity is unavoidable when a person is asked to state his occupation in one or two words. Some occupations have no clear-cut one- or two-word title. In the case of others, the same title may be associated with quite different occupations.

The completed returns were grouped and treated in the manner indicated in Table I. The size of the returns from certain of the smaller cities and towns did not warrant their consideration as separate samples. The returns from Minneapolis, St. Paul and Duluth and towns which might be considered suburban to these cities were treated as three separate groups. With the exception of Rochester, the other groups were determined geographically. The sample from Rochester was considered separately because of frequent reports that electrical disturbances from high-voltage electro-therapy equipment often tended to isolate this community from the standpoint of radio reception. That such is not the case to the extent anticipated at the outset of the study is apparent in the summary of the data from this city.

RESULTS

It will be remembered that the first question asked for the radio station most regularly listened to all around the clock. Table V presents a summary of the answers to this question. It is of interest

chiefly from a methodological point of view. Question (1) was asked primarily to determine coverage and to assist in the interpretation of the questions in which programs are mentioned. The validity of the answers may be called into question, however, when they are compared with the programs which are heard at various times of the day. This is especially true in localities in which differences in signal-strength are not appreciable or do not affect the ease with which any of several stations may be tuned. When two stations which are competing for a listening audience are located in different cities, the matter of civic pride may be a more potent determiner of the answer to the question than actual listening habits may be. It is suspected that this is true in the present study in the case of Minneapolis and St. Paul listeners. Civic rivalry between these two communities is traditional and may have played a considerable role in determining the answers to Question (1). This hypothesis seems partially justified by the summary of the programs heard regularly in these two cities. The high degree of favoritism which appears in Table V does not reappear in later tabulations of programs. The assumption may be, therefore, justified that station call letters are more intimately associated with the location of the station than with actual listening habits. This point will receive further consideration later. The location, power, and frequency of the radio stations mentioned in the returns are listed in Table VI.

Question (8) represents another way of asking Question (1). The variation involves an opportunity for the respondent to list more than one station as regularly listened to. The directions in Question (8) request the respondent to list the stations regularly heard in the order of his preference for them, putting the letters of the one he likes best first, etc. If only the first preference in this question is tabulated, the results are almost identical with those of Table V. This correspondence may be interpreted as a test-retest reliability or it may be understood as demonstrating only that preference is the chief determiner in the answer to Question (1). If these first choices may be assumed to be an adequate criterion, the answers to Question (1) may be validated against them and the resulting high coefficient used to discount the argument presented above to the effect that locality and civic pride were the prime factors determining the number of mentions for each station in Question (1). Such a counter argument, however, must also include a demonstration of the fact that these same factors (locality and civic feeling) are not important aspects of the answers to the questions asking for station preferences.

It is the writer's belief that they are. Argument and counter-argument on this point, however, must await further use of apparatus designed to record the station to which a given set is tuned and the exact length of time the set is tuned to what wave-length. These results must then be compared with the answers to questions similar to those under consideration.

On the assumption, then, that programs mentioned as heard is a better criterion, it was necessary to discover a method of treating the answers to the station-preference question in such a way that the results would correspond as closely as possible with the criterion. One method that suggests itself immediately is that of assigning scale values to each position in the preference scale and computing a mean scale value for each station. This was done and the resulting critical ratios between the mean scale values were enormous in the case of the two more popular Twin-City stations. The shortcoming of this method, however, lies in the fact that huge critical ratios which favored one station in the Minneapolis sample were equally large but favoring another station in the St. Paul sample. This would tend to invalidate the method from the standpoint of the criterion since no equally enormous shift in the programs mentioned occurred in the two samples.

Another and probably more significant drawback to this conventional technique of assigning scale values to positions in a preference scale is the psychological implication in giving certain numerical values to the various places in the scale. When a value of 1 is given to each mention in the first position, 2 to each second choice, 3 to each third choice, etc., it is implied that the first choice is liked twice as much as the second, three times as much as the third, etc. Psychologically, it seems impossible that such a situation actually exists in the case of radio stations regularly heard. If other numbers are assigned to the scale positions, they must of necessity be arbitrary until evidence to justify the weight that each scale position shall have is obtained. To determine this weighting exactly is a major research problem in itself, and there is every reason to believe that the weights will vary from scale to scale depending upon the purpose of the scale, the variable being rated and the person doing the rating.

Another method of treating the answers to the station-preference question involves simply a tabulation of the number of times each station was mentioned regardless of its position on the scale. The results of this tabulation are shown in Table VII. The relative positions of the stations according to this tabulation seem to adhere

much more closely both to a logical analysis of the station preferences of Twin-City residents and to the criterion of programs mentioned. The picture that this table gives of station preferences outside of the Twin-Cities also conforms rather closely with that presented by the programs mentioned in reply to other questions. The data of this table permit of such conclusions as that a particular station was mentioned twice as often, three times as often, etc., as another and from these conclusions inferences regarding preference may be made. The table also readily affords intercommunity comparisons.

The answers to Question (8) may thus be interpreted as indicating stations regularly listened to. The chief advantage of instructing the respondent to rank stations in order of preference probably lies in the fact that the stations mentioned were those heard more or less regularly.

Tables VIII through XIII contain tabulations of the programs mentioned in response to the questions which broke the listening day into the six periods mentioned above. From these tables, resemblances and dissimilarities between communities may be noted in terms of the percentages of respondents mentioning each program. It was hoped that community similarities and differences might be quantified in some sort of correlation coefficient or other measure of relationship. The interpretation of such a coefficient, however, would be difficult if not impossible. A chief reason for the ambiguity may be found in the fact that many programs may be heard over any of two or three different stations and at more than one time. Resemblances and differences between communities in terms of the programs mentioned may be determined quite as adequately by comparisons of the percentage of mentions. The significance of the differences between these percentages may be determined by reference to appropriate tables.

General trends in the type of programs mentioned as heard during various periods of the day may be noted. The early morning programs are those which contain time signals, weather reports, news and occasional entertainment. Serial features seem to be the outstanding characteristic of late morning and of afternoon listening. The morning programs also contain household information pertaining to cooking and decorating and are obviously directed to women. The afternoon programs are chiefly entertainment features including those which occur in the late afternoon for children. Some of the educational programs which occur during these periods were also mentioned in the replies. Evening programs include those which

contain some of the "heavier" presentations, including plays, symphony and news commentators and also comedy and music. Both afternoon and evening program mentions contain some reference to "sport." Our code allowed for the separate tabulation of game broadcasts and sports news and reviews. When simply "sports" was mentioned in reply to a question, it was tabulated with the game broadcasts. It is quite possible, however, that some of the respondents were referring to sports news and reviews by this one-word answer. It is especially noteworthy that the "news" item ranks relatively high during each period of the day. This may indicate a tendency on the part of many listeners to rely on the radio for their news, although, of course, there is no indication that they depend solely on the radio for this information.

The names given to the programs in all the tables in which they are tabulated in this paper are the names by which the programs were most frequently identified. By far the most frequent method of identification was that of the name of a person associated with the program. Sometimes this name was that of a real person while in other cases it was that of a character in the program. The other methods of identifying programs in order of the frequency with which they occurred were: Name of program; sponsor of program; name of product advertised. In tabulating the frequencies all totals under each method of identification were used and the grand total in each case given the identification most frequently used.

A program does not appear in the summary tables unless it was mentioned by 4% of those answering a given question. The apparent exceptions to this rule are cases in which a program may have occurred in more than 4% of the answers in one community and in a smaller percentage of replies in other communities. Under these conditions, the total number of mentions for the program was tabulated for each community in which it was mentioned.

The particular psychological significance of the arrangement of the programs in each of Tables VII through XII is doubtful. The position of each program in these tables was determined in terms of the number of mentions in the total sample. Before this position can be interpreted as an indication of listener-preference it must first be demonstrated that those programs mentioned as heard most frequently are also the best liked. That this may be true in the case of the programs with the highest frequency of mention is indicated by the fact that these same programs from the upper frequency levels for each period of the day also appear in the tabulations of answers

to questions in which the best liked programs were requested. Whether it applies to those in the middle and lower frequencies is a moot point. The writer is acquainted with some unpublished evidence which indicates that the stations heard most easily or most easily tuned are not necessarily best liked. That the same may be true of programs has not been demonstrated and it is a little difficult to imagine that a program mentioned as regularly heard is not well liked. Exceptions to the latter supposition would occur, however, when a radio is left turned on during the time between two well liked programs or is in operation for some time before or after a highly preferred program.

Table XIV lists the programs heard most regularly by children. In interpreting this table it must be remembered that this question was answered by parents—usually the mother. A few of the returned questionnaires showed evidence of having been turned over to the children for the answers to the question regarding the programs they listen to regularly, but by far the majority were in the same handwriting as the rest of the questionnaire. It could have happened, of course, that the children were consulted with regard to these replies and it may be quite possible that the parent is familiar with the regular listening habits of the children. The arrangement of the programs in this table, however, may not necessarily be the same as that which might be obtained if the children themselves were asked for the answers to the question.

The number and type of programs intended principally for adults which are mentioned with relatively high frequencies in this table might serve as basis for some interesting speculations regarding these programs or the entertainment tastes of child-listeners. This point will be brought up again in connection with a later tabulation.

Tables XV, XVI, and XVII present the preferences of the husband and wife in the home with those of the wife broken down into night and daytime listening. Sex differences with regard to these preferences are quite apparent with the majority of them being statistically significant. The arrangement of the programs in these tables is partially validated by frequencies of mention of the same programs in connection with the time of day in which they are heard. Since the question explicitly asked for the programs best liked, the arrangement in these tables may be interpreted as a preference order. Total number of mentions of a program regardless of its position in the answer was again used as the method of summarizing these answers. The assigning of scale values to positions in the scale was

believed to be questionable procedure here as well as in the treatment of the station preferences. Although the rank order in these tables correlates .96 with the rank order obtained by determining a mean scale value, the same considerations which were mentioned above would discourage the use of a scale technique in the treatment of these answers.

The data for the Minneapolis sample which are listed in Tables XIV through XVII were broken down further into occupational groups and retabulated in Tables XVIII through XXI. Because of the small number of cases (22), Group IV was omitted from this tabulation. In spite of the fact that the Minneapolis sample was the largest of those used in this survey, it may be noted that many of the percentages for Groups VI and VII in these tables are based on frequencies which are too small to be statistically valid or reliable.

In these tables may be found programs which show a higher percentage of mentions for Group I and gradually diminishing percentages in each of the occupational groups, programs in which exactly the opposite is true, and programs which apparently cut through these occupational classifications. Whether this is an indication of intellectualized responses or reflects a true picture of the preferences of these occupational groups cannot be known definitely. The writer is inclined to believe that the trends in this table represent real differences between these groups. Many of the proportions are too consistently maintained to be disregarded in a sample of the size used in this study.

Tables XXII and XXIII show the relationship between the number of hours the radio is in use each day and occupational status and number of children under 16 years of age respectively. Trends may be noted in both cases, although differences between individual means are not statistically significant. It has been shown that the amount of time the radio is in use is usually underestimated.³ This would mean that the absolute value of the figures in these tables is somewhat higher than is indicated, although the relative values for each group would probably remain about the same even when corrected for the attenuation. It will be remembered that there is a relationship between the number of children under 16 and the occupation of the head of the family (Table III). The amount of time

³ Stanton, F. N., *Checking the Checkers*, Adv. & Sell., 1935, 26, 24. This study indicates that the error in estimating the average amount of time the radio is in use daily is about 10% of the time that it was actually turned on. Perfect agreement between estimates and the actual time the radio is in use occur only when the question breaks the listening day into periods.

the radio is in use each day may thus be determined by the number of children in the family or socio-economic status or both.

SUMMARY AND CONCLUSIONS

Keeping in mind the limitations imposed by the sample and the type of questionnaire, we feel that the data justify the following conclusions:

(1) Radio listening habits are related to socio-economic status as reflected in a functional classification of the occupation of the head of the family. These differences are indicated by the type of program mentioned as regularly listened to and the type of program best liked. Those programs mentioned most frequently by the professional and semi-professional groups are typified by opera, symphonies, and classical music, news commentators (including dramatizations of news events), and educational broadcasts. Programs which are mentioned most frequently by those in the slightly skilled and unskilled groups are characterized by a high degree of excitement and dramatic appeal, comedy, amateur performances, and serial dramatizations. Programs which seem to cut through these occupational classifications are those which include news, household helps and information, sports, some comedy, and certain of the less emotional dramatic presentations.

(2) Various members of the family seem to have favorite programs, although there is considerable overlapping with respect to these preferences. Children prefer the highly emotional or exciting program whether it is a program designed primarily for children or for adults. Next in frequency of mention are the programs whose chief characteristic is comedy. Programs which present plays as such are also frequently mentioned. Husband and wife preferences for the evening programs are somewhat similar with the exception of the higher rating given by the wife to plays and dramatics. A significantly higher rank is given by the men to broadcasts pertaining to sport and sporting events. Women tend to rank programs featuring romantic male stars higher than do the men. Daytime preferences for the wife for the most part tend to favor the many serial dramatic presentations. A significant preference for informational or educational programs may also be noted.

(3) The average amount of time the radio is in use each day is greater in the homes of lower socio-economic status and in the homes with the larger number of children under sixteen years of age. Since, however, number of children and occupational status are related, the

factor determining the number of hours the radio is in use is not clear.

(4) Radio station preferences cannot be adequately described by assigning simple scale values to positions in the scale when there are two or more stations competing strongly for any of the choices.

(5) Questions which ask for programs heard at various times during the listening day give results that are positively related at the higher frequency levels to questions dealing with around-the-clock preferences.

(6) The need for further investigation is indicated to determine the number of replies to each question necessary to give valid results in the case of an unaided recall questionnaire as well as to determine the relationship that exists between frequency of mention of a program and its position in a preference scale.

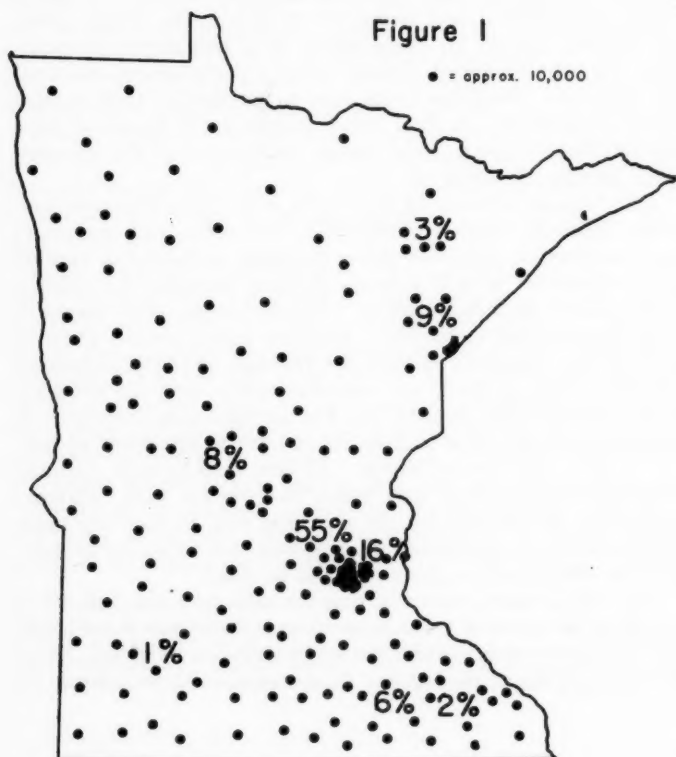


TABLE I

Description of the sample in terms of the population of the communities sampled, including a tabulation of the questionnaires distributed and those which were returned.

Group	Population*	Question. distrib.	Question. returned	% of total pop.
MINNEAPOLIS -----	464,356	10,000	5,382	
Edina -----	3,138	50	37	
Robinsdale -----	4,427	150	107	
	471,921	10,200	5,526	1.17
ST. PAUL -----	271,606	5,000	1,520	
So. St. Paul -----	10,009	1,000	45	
W. St. Paul -----	4,463	200	40	
Lake Elmo -----	218	50	14	
Stillwater -----	7,173	100	5	
	293,469	6,350	1,624	.55
DULUTH -----	101,463	2,000	885	
Proctor -----	2,521	100	18	
D	103,983	2,100	903	.87
Grand Rapids -----	3,206	200	26	
Hibbing -----	15,666	400	71	
Mountain Iron -----	1,349	300	24	
Parkville -----	2,081	100	25	
Virginia -----	11,963	250	111	
E	34,265	1,250	257	.75
Brainerd -----	10,221	300	181	
Alexandria -----	3,876	100	61	
Detroit Lakes -----	3,675	100	93	
Little Falls -----	5,014	200	55	
St. Cloud -----	21,000	500	132	
Willmar -----	6,173	300	283	
F	49,959	2,400	805	1.61
Marshall -----	3,250	100	44	
Worthington -----	3,878	75	72	
G	7,128	175	116	1.63
Rochester -----	20,621	500	173	.84
H				
Albert Lea -----	10,169	200	111	
Austin -----	12,276	310	148	
Faribault -----	12,767	300	150	
Mankato -----	14,038	300	26	
Winona -----	20,850	500	193	
	70,100	1,610	628	.90
Totals -----	1,051,446	24,085	10,032	.95

* Figures from U. S. 1930 census.

TABLE II
SAMPLE CHARACTERISTICS

Occupation of head of family	Standard Sample				This Sample								
	U. S. %	Minn. %	Mpls. %	St. P. %	Duluth %	Minn. N	%	Mpls. N	%	St. P. N	%	Duluth N	%
I-----	2.58	2.38	3.38	4.04	3.36	672	8.08	454	10.01	82	6.30	43	5.40
II-----	7.17	7.26	12.64	12.28	11.02	1550	18.63	977	21.54	179	13.75	134	16.83
III-----	13.78	12.77	20.60	18.91	18.45	1750	21.04	875	19.29	325	24.96	163	20.48
IV-----	15.31	22.61	.23	.26	.52	143	1.72	22	.49	20	1.53	11	1.38
V-----	24.36	21.37	37.20	37.08	33.76	3184	38.28	1747	38.51	534	41.01	319	40.08
VI-----	14.35	9.05	12.91	14.71	13.94	724	8.70	357	7.87	125	9.60	91	11.43
VII-----	22.46	24.56	12.54	12.74	18.96	295	3.55	104	2.29	47	3.61	35	4.40
Total -----						8318		4536		1312		796	
No data -----													
Dead -----						836		502		181		22	
Unemployed -----						60		40		8		4	
Retired -----						33		22		5		1	
Relief -----						51		22		10		3	
Unclass. -----						70		33		5		5	
Women -----						264		124		46		29	
						400		247		57		43	
Grand Totals -----						10032		5526		1624		903	

TABLE III

Number of individuals under 21 years of age in each family tabulated according to the occupation of the head of the family.

Minneapolis		Occupation							
		I	II	III	IV	V	VI	VII	Total
No. of replies	-----	449	972	850	22	1723	351	101	5327
Total under 16 years	-----	675	1597	1489	39	2898	716	202	8709
Mean	-----	1.50	1.64	1.75	1.77	1.68	2.04	2.00	1.63
S. D.	-----	1.13	1.16	1.32	1.78	1.20	1.53	1.41	1.24
Total 16-21 years	-----	221	445	478	40	774	167	63	2605
Mean	-----	.49	.46	.56	1.8	.45	.48	.62	.49
Total under 21 years	-----	896	2042	1967	79	3672	883	265	11314
Mean	-----	2.00	2.10	2.31	3.59	2.13	2.52	2.62	2.12

TABLE IV

Number of programs mentioned in each question asking for names of programs—expressed in percentages of those answering the question. (The third-last entry in each row refers to the number mentioning the corresponding number of programs or more.)

Question	Replies	Number of Programs Mentioned										No. spaces provided for answers	No. answers incl. in this study
		1	2	3	4	5	6	7	8	9			
6:30-9:00	8006	N 2068 % 25.8	2573 32.1	1734 21.7	708 8.8	448 5.6	394 4.9	81 1.0				6	7
3 9:00-noon	7393	N 1349 % 18.3	1253 17.0	1290 17.5	1022 13.8	833 11.3	1140 15.4	285 3.9	221 3.0			6	8
4 noon-1:30	6114	N 2586 % 42.3	1658 27.1	1149 18.8	385 6.3	185 3.0	103 1.7	41 .7	7 .1			8	8
5 1:30-6:00	7368	N 1253 % 17.0	1128 15.3	1185 16.1	1068 14.5	813 11.0	622 8.4	479 6.5	719 11.1			8	8
6 6:00-9:00	8699	N 791 % 9.1	932 10.7	1185 13.6	1108 12.7	1056 12.1	2075 23.9	987 11.4	565 6.5			6	8
7 after 9:00	7209	N 1895 % 26.3	1862 25.8	1457 20.2	861 11.9	491 6.8	267 3.7	376 5.2				8	7
11 Children	6937	N 612 % 8.8	752 10.8	1091 15.7	1096 15.8	745 10.7	668 9.6	515 7.4	972 14.0	486 7.0		8	9
14 Husband	7428	N 444 % 6.0	555 7.5	761 10.2	909 12.2	4073 54.8	686 9.2					5	6
14 Wife—Night	7414	N 517 % 7.0	654 8.8	898 12.1	925 12.5	3713 50.1	376 5.1	331 4.5				5	7
14 Wife—Day	7144	N 702 % 9.8	895 12.5	1025 14.4	1025 14.4	3148 44.1	349 4.9					5	6

TABLE V
Answers to the question: "Which radio station do you listen to most (all 'round the clock)?" Tabulated according to communities.

No. answering question	Total		Mpls.		St. Paul		Duluth		E		F		G		H	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<i>Communities</i>																
KDAL	16	.2					16	1.8								
KFYR	2	.0							2	.3						
KROC	47	.5									12	10.5	47	31.3		
KSOO	12	.1														
KSTP	2615	28.1	1686	33.2	904	61.8			6	.8	1	.9	1	.6	17	2.8
WICAL	1	.0				.1										
WCCO	4925	53.0	3162	62.3	398	27.2	9	1.0	75	31.4	637	81.9	81	71.1	81	54.0
WDAY	77	.8							77	9.9					482	79.8
WDGY	205	2.2	145	2.9	39	2.7			12	1.5					9	1.5
WEBC	899	9.7					856	96.9	43	18.0						
WENR	1	.0											1	.6		
WGN	11	.1			1	.1			1	.4	1	.1	2	1.7	1	.6
WHLB	57	.6							57	23.8						
WHO	73	.8							2	.8	3	.4	8	7.0	6	4.0
WKBH	8	.1													54	8.9
WLB	3	.0	3	.1											8	1.3
WLS	8	.1														
WLW	19	.2	2	.0												
WMFG	54	.6														
WMIN	34	.4	15	.3	19	1.3										
WMT	11	.1														
WNAX	51	.5	1	.0	1	.1										
WOI	7	.1														
WOW	4	.0														
WTCN	157	1.7	58	1.1	99	6.8			1	.1					3	.5
"Outside"	4	.0	2	.0			1	.1								

TABLE VI
Location, power and frequency of stations mentioned in replies to Questions 1 and 8. (Figures from Standard Rates
aid Data Service, January, 1937.)

Call Letters	Studio	Transmitter	Power (watts)	Frequency (kilocycles)
KDAL	Duluth, Minn.	Duluth, Minn.	100	1,500
KPYR	Bismarck, N. D.	Bismarck, N. D.	5,000 day 1,000 night	550
KGDE	Fergus Falls, Minn.	Fergus Falls, Minn.	250 day 100 night	1,200
KMOX	St. Louis, Mo.	St. Louis, Mo.	50,000	1,090
KOA	Denver, Colo.	Denver, Colo.	50,000	830
KROC	Rochester, Minn.	Cascade Township, Minn.	100	1,310
KSOO	Sioux Falls, S. D.	Sioux Falls, S. D.	2,500	1,110
KSTP	St. Paul, Minn.	Rosetown, Minn.	25,000 day 10,000 night	1,460
WCAL	Minneapolis, Minn.	Northfield, Minn.	2,500 day 1,000 night	1,250
WBBM	Chicago, Ill.	Glenview, Ill.	50,000	770
WCCO	Minneapolis, Minn.	Anoka, Minn.	50,000	810
WDAY	St. Paul, Minn.	Fargo, N. D.	5,000 day 1,000 night	940
WDGY	Fargo, N. D.	Minneapolis, Minn.	5,000 day 1,000 night	1,180

WEBC	Duluth, Minn.	Superior, Wis.	5,000 day 1,000 night	1,290
WENR	Chicago, Ill.	Downers Grove, Ill.	50,000	870
WGN	Chicago, Ill.	Elgin, Ill.	50,000	720
WHLB	Virginia, Minn.	Virginia, Minn.	100	1,370
WHO	Des Moines, Ia.	Mitchellville, Ia.	50,000	1,000
WJZ	New York, N. Y.	Boundbrook, N. J.	50,000	760
WKBH	LaCrosse, Wis.	LaCrosse, Wis.	1,000	1,380
WLB	Minneapolis, Minn.	Minneapolis, Minn.	1,000	1,250
WLS	Chicago, Ill.	Downers Grove, Ill.	50,000	870
WLW	Cincinnati, Ohio	Mason, Ohio	500,000	700
WMAQ	Chicago, Ill.	Bloomington, Ill.	50,000	670
WMFG	Hibbing, Minn.	Hibbing, Minn.	250 day 100 night	1,210
WMIN	St. Paul, Minn.	St. Paul, Minn.	250 day 100 night	1,370
WMT	Minneapolis, Minn. Cedar Rapids, Ia.	Marion, Ia.	5,000 day 1,000 night	600
WNAX	Yankton, S. D.	Yankton, S. D.	5,000 day 1,000 night	570
WOI	Ames, Ia.	Ames, Ia.	5,000	640
WOW	Omaha, Neb.	Omaha, Neb.	5,000	590
WSM	Nashville, Tenn.	Nashville, Tenn.	50,000	650
WTCN	Minneapolis, Minn.	St. Paul, Minn.	5,000 day 1,000 night	1,250

TABLE VIII

Answers to the question: "To what programs do you generally listen in the morning between 6:30 and 9:00 A. M." expressed in percentage of the total number of those who answered the question and tabulated according to the communities sampled.

Program	Total		Minneapolis		St. Paul		Duluth		D		E		F		G		H	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Communities																		
Gene and Glenn	2964	37.0	1776	40.6	459	36.9	34	4.5	38	17.0	349	51.2	16	16.5	54	39.1	238	47.4
Dayton's Musical Chimes	2448	30.6	1697	38.8	144	11.6	4	.5	14	6.3	327	47.9	43	44.3	15	10.9	204	40.6
News	1838	23.0	980	22.4	243	19.5	275	36.8	44	19.7	114	16.7	39	40.2	37	26.8	106	21.1
Time Signals	1761	22.0	864	19.8	257	20.6	128	17.1	44	19.7	249	36.5	22	22.7	45	32.6	152	30.3
Breakfast Club	1488	18.6	773	17.7	420	33.7	192	25.7	16	7.2	74	10.9	1	1.0	1	.8	11	2.2
Early Risers	1047	13.1	519	11.9	249	20.0	231	30.9	6	2.7	22	3.2			11	8.0	9	1.8
Temperature	992	12.4	384	8.8	184	14.8	283	37.8	41	18.4	46	6.7	6	6.2	19	13.8	29	5.8
Air Almanac	785	9.8	575	13.2	57	4.6					94	13.8	11	11.3	10	7.2	38	7.6
Jr. Broadcasters	774	9.7	535	12.2	71	5.7	3	.4	3	1.3	102	15.0	6	6.2	6	4.3	48	9.6
World News	676	8.4	432	9.9	173	13.9	4	.5			22	3.2			28	20.3	17	3.4
Oshkosh Boys	557	7.0	398	9.1	55	4.4	4	.5	5	2.2	66	9.7	1	1.0	5	3.6	23	4.6
Music	508	6.3	125	2.9	78	6.3	108	14.4	6	2.7	32	4.7	15	15.5	11	8.0	31	6.2
Devotions			27	.6	14	1.1	41	5.5	2	.9	15	2.2	4	4.1	8	5.8	20	4.0
Milkman's Club			239	5.5	135	10.8												
Air Newspaper			216	4.9	65	5.2												
Family Altar			228	5.2														
Good Morning			107	2.4	58	4.7												
Musical Clock			50	1.1	52	4.2												
Glass Block Hour																		
Breakfast Time Table																		
Morning Melodies																		
Montgomery Ward																		
Requests																		
Three T's																		
The Pest																		
No. answering question	8006		4371		1245		748		223		682		97		61	44.2	502	
															138			

TABLE IX

Answers to the question: "To what programs do you generally listen in the morning between 9:00 and 12:00 A. M." expressed in percentages of the total number of those who answered the question and tabulated according to the communities sampled.

9:00-12:00 A. M. Program	Total		Minneapolis		St. Paul		Duluth		D		E		F		G		H	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Today's children	3292	44.5	1662	43.4	682	59.0	720	90.5	97	49.0	27	3.9	3	3.9	24	16.4	77	15.2
Betty and Bob	2649	35.8	1384	35.2	379	32.8	356	44.7	119	60.1	227	33.0	12	15.6	14	9.6	158	31.1
Farm & Home Hour	2511	34.0	1081	28.3	593	51.3	615	77.3	52	26.3	108	15.7	3	3.9	8	5.5	51	10.0
Kitty Keene	1375	18.6	758	19.8	200	17.3			31	15.7	227	33.0	10	13.0	36	24.0	113	22.2
Ma Perkins	1301	17.6	774	20.2	206	17.8	4	.5	20	10.1	166	24.2	12	15.6	26	17.8	93	18.3
Gold Medal	1202	16.3	721	18.8	161	13.9	(27)		21	10.6	187	27.2	11	14.3	38	26.0	63	12.4
Mary Marlin	1198	16.2	596	15.6	298	25.8	7	.9	2	1.0	127	18.5	9	11.7	32	21.9	136	26.8
Modern Cinderella	1174	15.9	722	18.9	204	17.7	9	1.1	23	11.6	130	18.9	6	7.8	14	9.6	66	13.0
The Gumps	1162	15.7	637	16.6	140	12.1	6	.8	14	7.1	225	32.8	12	15.6	37	25.3	91	17.9
Big Sister	981	13.3	602	15.7	138	11.9	10	1.3	23	11.6	178	25.9	7	9.1	23	15.8	75	14.8
Hymns of All Churches	956	13.0	269	7.0	39	3.4	371	46.6	77	38.9	105	15.3	5	6.5	20	13.7	70	13.8
Voice of Experience	875	11.8	429	11.2	186	16.1	158	19.8	10	5.1	42	6.1	1	1.3	7	4.8	42	8.3
News	863	11.7	477	12.5	88	7.6	101	12.7	29	14.6	88	12.8	15	19.5	15	10.3	65	12.8
Backstage Wife	772	10.4	492	12.9	206	17.8					27	3.9	2	2.6	10	6.8	35	6.9
Dr. Dafoe	716	9.7	375	9.8	65	5.6	9	1.1	12	6.1	150	21.8	7	9.1	18	12.3	80	15.7

Betty Crocker	715	9.7	332	8.7	124	10.7	(19)	26	13.1	137	19.9	8	10.0	14	9.6	74	14.6	
Mark Tyme	656	8.9	437	11.4	201	17.4		1	.5	4	.6			1	.7	12	2.4	
Household Forum	535	7.2	386	10.1	128	11.1		1	.5	9	1.3	1	1.3	4	2.7	6	1.2	
Music	480	6.5	156	4.1	123	10.6	34	4.3	11	5.6	57	8.3	11	14.3	15	10.3	73	14.4
Between Bookends	477	6.5	268	7.0	36	3.1	4	.5	13	6.6	105	15.3	6	7.8	8	5.5	37	7.3
Happy Hollow Gang	380	5.1	284	7.4	60	5.2				27	3.9					9	1.8	
John K. Watkins	359	4.9	224	5.9	28	2.4				73	10.6	4	5.2	9	6.2	21	4.1	
Magazine of the Air	311	4.2	172	4.5	24	2.1		10	5.1	67	9.8			10	6.8	28	5.5	
Polly the Shopper			184	4.8	77	6.7				5	.7			8	5.5	7	1.4	
The Daily			119	3.1	59	5.1												
Houseboat Hannah							386	48.5	114	57.6								
Press Radio News							166	20.9										
Betterson Family							123	15.5	21	10.6								
Woman's Hour							70	8.8	11	5.6								
Whoopie John			38	1.0	78	6.8				5	.7	3	3.9					
Women's Review							2	2.2	24	12.1								
Devotions										36	5.2			8	5.5			
Gospel Singer			22	.6	26	2.3	5	.6	1	.5	27	3.9	3	3.9	8	5.5	14	2.8
David Harum														15	10.3	29	5.7	
Ruth Galvin														7	4.8	17	3.3	
No. answering question	.7393		3826		1155		796		198		687		77		146		508	

TABLE X

Answers to the questions: "To what programs do you generally listen in the afternoon between noon and 1:30 P. M.," expressed in percentages of the total number of those who answered the question and tabulated according to the communities sampled.

12:00-1:30 P. M.

Program	Communities																	
	Total		Minneapolis		St. Paul		Duluth		D		E		F		G		H	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
News	1646	26.9	915	29.8	134	14.6	153	21.1	35	21.0	134	22.6	56	60.2	51	40.5	168	39.2
School of the Air	1467	24.0	823	26.8	161	17.6	6	.8	16	9.6	335	56.4	6	6.5	35	27.8	85	19.8
Noon Highlights	1084	17.7	608	19.8	64	7.0	15	2.1	39	23.4	179	30.1	31	33.3	28	22.2	120	28.0
Slim Jim	951	15.6	674	22.0	141	15.4	1	.1			105	17.7			5	4.0	25	5.8
Music	649	10.6	260	8.5	145	15.8	51	7.0	10	6.0	73	12.3	15	16.1	22	17.5	73	17.0
Hope Alden	434	7.1	274	9.0					23	13.8	105	17.7	3	3.2	10	7.9	19	4.4
World News	422	6.9	254	8.3	106	11.6					14	2.4			24	19.0	24	5.6
Inquiring Reporter	250	4.1	121	3.9	121	13.2					6	1.0			1	.8	1	.2
One Girl	220	3.6	131	4.3	24	2.6	3	.4	3	1.8	40	6.7	3	3.2	1	.8	15	3.5
Front Page			132	4.3	43	4.7					7	1.2					5	1.2
Happy Bob			69	2.3	30	3.3					4	.7						
Katherine Cravens			74	2.4	12	1.3	3	.4	4	2.4	54	9.1			6	4.8	15	3.5
Magic Key			102	3.3	2	.2	49	6.8			3	.5					4	.9
Aunt Jenny			75	2.4	23	2.5			6	3.6	59	9.9			4	3.2	8	1.9
Carnival							64	8.8	1	.6								
Noonday Review									14	8.4								
Lem Hawkins											24	4.0	1	1.1				
Stocks			25	.8	7	.8	15	2.1	2	1.2	12	2.0	9	9.7	11	8.7	9	2.1
Jolly Norsemen															28	22.2		
No. answering question	6114		3065		915		725		167		594		93		126		429	

TABLE XI

Answers to the question: "To what programs do you generally listen in the afternoon between noon and 1:30 P. M.," expressed in percentages of the total number of those who answered the question and tabulated according to the communities sampled.

TABLE XII

Answers to the question: "To what programs do you generally listen in the evening between 6:00 and 9:00 P. M." expressed in per-centages of the total number of those who answered the questions and tabulated according to communities sampled.

6:00-9:00 P. M.

Program	Total		Minneapolis		St. Paul		Duluth		D		E		F		G		H	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Boake Carter	3213	36.9	1911	39.5	425	30.6	96	11.6	46	23.8	402	57.8	46	43.4	44	33.6	243	46.6
Lux Radio Theater	3151	36.2	1980	41.0	523	37.6	92	11.1	51	26.4	288	41.4	32	30.2	33	25.2	152	29.1
Major Bowes	2536	29.2	1502	31.1	427	30.7	88	10.6	43	22.3	235	33.8	46	43.4	43	32.8	152	29.1
Burns & Allen	2011	23.1	1274	26.4	322	23.4	19	2.3	28	14.5	192	27.6	39	36.8	26	19.8	111	21.3
Fred Allen	1888	21.7	1075	22.2	349	25.1	220	26.6	24	12.4	97	13.9	25	23.6	25	19.1	73	14.0
Jack Benny	1755	20.2	907	18.8	308	22.2	267	32.3	33	17.1	95	15.6	35	33.0	30	22.9	80	15.3
One Man's Family	1449	16.7	522	10.8	270	19.4	559	67.6	20	10.4	47	6.8	3	2.8	4	3.1	24	4.6
Easy Aces	1417	16.3	947	19.6	228	16.4	3	.4	19	9.8	133	19.1	7	6.6	14	10.7	66	12.6
Fibber McGee	1197	13.8	513	10.6	229	16.5	394	47.6	6	3.1	30	4.3	2	1.9	5	3.8	18	3.4
Eddie Cantor	1192	13.7	640	13.2	169	12.2	24	2.9	15	7.8	174	25.0	34	32.1	32	24.4	104	19.9
Kate Smith	1078	12.4	664	13.7	159	11.4	25	3.0	13	6.7	115	16.5	20	18.9	15	11.5	67	12.8
Hollywood Hotel	1062	12.2	754	15.6	121	8.7	9	1.1	6	3.1	91	13.1	10	9.4	19	14.5	52	10.0
Popeye	970	11.2	642	13.3	156	11.2	7	.8	7	3.6	87	12.5	6	5.7	8	6.1	57	10.9
Wayne King	920	10.6	447	9.2	139	10.0	171	20.7	26	13.5	66	9.5	2	1.9	7	5.3	62	11.9
Rudy Vallee	814	9.4	387	8.0	142	10.2	234	28.3	9	4.7	16	2.3	5	4.7	3	2.3	18	3.4
Pick and Pat	742	8.5	496	10.3	131	9.4	1	.1	2	1.0	57	8.2	8	7.5	9	6.9	38	7.3
Show Boat	678	7.8	349	7.2	116	8.3	161	19.5	3	1.6	21	3.0	5	4.7	3	2.3	20	3.8
Robert Ripley	668	7.7	303	6.3	151	10.9	153	18.5	11	5.7	18	2.6	1	.9	9	6.9	22	4.2
Ford Hour	624	7.2	406	8.4	83	6.0	27	3.3	1	.5	53	7.6	2	1.9	9	6.9	43	8.2
News	618	7.1	345	7.1	117	8.4	9	1.1	26	13.5	42	6.0	12	11.3	15	11.5	52	10.0
Fred Astaire	608	7.0	358	7.4	86	6.2	108	13.1	7	3.6	20	2.9	5	4.7	8	6.1	16	3.1
Nelson Eddy	535	6.2	358	7.4	80	5.8	4	.5	6	3.1	47	6.8	4	3.8	6	4.6	30	5.7
Cavalcade of America	525	6.0	339	7.0	71	5.1	11	1.3	1	.5	57	8.2	1	.9	7	5.3	38	7.3
Do You Want to be an Actor	425	4.9	156	3.2	65	4.7	99	12.0	10	5.2	21	3.0	5	4.7	9	6.9	60	11.5
Ben Bernie	404	4.7	200	4.1	66	4.7	79	9.6	5	2.6	29	4.2			6	4.6	19	3.6
Jack Oakie	371	4.3	222	4.8	44	3.2	3	.4	3	1.6	60	8.6	17	16.0	4	3.0	18	3.4
Al Jolson	365	4.2	236	4.9	41	2.9	9	1.1	6	3.1	49	7.0	4	3.8	4	3.1	16	3.1
Music			203	4.2	48	3.5	11	1.3	14	7.3	32	4.6	5	4.7	12	9.2	12	2.3
Voice of Experience			192	4.0	57	4.1	56	6.8	1	.5	20	2.9			4	3.1	11	2.1
Uncle Ezra			102	2.1	48	3.5	109	13.2	6	3.1	20	2.9	2	1.9	5	3.8	11	2.1
Alexander Woolcott			192	4.0	27	1.9			10	5.2	41	5.9	1	.9	1	.8	13	2.5
Sports (Games)			117	2.4	79	5.7	1	.1	16	8.3	21	3.0	1	.9	7	5.3	5	1.0
Amos and Andy			67	1.4	50	3.6	18	2.4	9	4.7	28	4.0	19	17.9	17	13.0	68	13.0
Horace Heidt			103	2.1	21	1.5			34	4.9	12	11.3			5	3.8	26	5.0
Lum & Abner							5	.6	2	1.0	11	1.6	1	.9	10	7.6	14	2.7
No. answering question	8699		4834		1390		827		193		696		106		131		922	

TABLE XIII

Answers to the question: "To what programs do you generally listen in the evening after 9:00 P. M." expressed in percentages of the total number of those who answered the question and tabulated according to the communities sampled.

9:00 P. M. and after

Communities

Program	Total		Minneapolis		St. Paul		Duluth		D		E		F		G		H	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Gangbusters	3078	42.7	1940	48.0	599	54.9	83	12.1	34	23.6	236	38.9	16	20.8	40	29.0	130	30.7
First Nighter	1972	27.4	1091	27.0	348	31.9	374	54.7	31	21.5	59	9.7	10	13.0	8	5.8	51	12.1
March of Time	1744	24.2	1140	28.2	199	18.2	67	9.8	31	21.5	173	28.5	15	19.5	17	12.3	102	24.1
News	1645	22.8	996	24.6	243	22.3	161	23.5	26	18.1	95	15.7	21	27.3	14	10.1	89	21.0
Bing Crosby	1453	20.2	732	18.0	248	22.7	298	43.6	14	9.7	61	10.1	13	16.9	21	15.2	66	15.6
Cedric Adams	1406	19.5	1073	26.5	92	8.4			164	27.1	11	14.3			6	4.3	60	14.2
Hit Parade	1140	15.8	608	15.0	259	23.7	83	12.1	15	10.4	97	16.0	40	51.9	10	7.2	28	6.6
Music	1081	15.0	533	13.2	164	15.0	65	9.5	39	27.1	90	14.9	29	37.7	28	20.3	133	31.4
Community Sing	696	9.7	437	10.8	133	12.2	19	2.8	3	2.1	70	11.6	2	2.6	9	6.5	23	5.4
National Barn Dance	633	8.8	131	3.2	78	7.1	190	27.8	38	26.4	114	18.8	3	3.9	22	15.9	57	13.5
Sports (Games)	503	7.0	253	6.3	188	17.2	14	2.0	16	11.1	13	2.1	2	2.6	8	5.8	9	2.1
Sport News	484	6.7	333	8.2	102	9.3			1	.7	28	4.6	2	2.6	6	4.3	12	2.8
Wayne King	459	6.4	255	6.3	28	2.6			11	7.6	81	13.4	5	6.5	7	5.1	72	17.0
General Motors	429	6.0	278	6.9	55	5.0	60	8.8	3	2.1	17	2.8	3	3.9	4	2.9	9	2.1
Rollie Johnson	393	5.5	260	6.4	33	3.0					79	13.0	3	3.9	4	2.9	14	3.3
Floyd Gibbons	328	4.5	196	4.8	56	5.1	8	1.2	8	5.6	38	6.3	6	7.8	3	2.2	13	3.1
Lights Out	290	4.0	161	4.0	73	6.7	39	5.7	4	2.8	12	2.0					1	.2
World News	257	3.6	168	4.2	50	4.6	7	1.0	3	2.1	10	1.7			6	4.3	13	3.1
Umbrella Court	216	3.0	192	4.7	22	2.0					1	.2					1	.2
Jack Pearl			123	3.0	79	7.2	34	5.0	8	5.6	5	.8	2	2.6	2	1.4	12	2.8
Amos & Andy			16	.4	11	1.0	65	9.5	20	13.9	43	7.1	7	9.1	5	3.6	35	8.3
Paul Sullivan			7	.2	4	.4	10	1.5	21	14.6	20	3.3	1	1.3	8	5.8	30	7.1
No. answering question	7209		4045		1092		684		144		606		77		138		423	

TABLE XIV
CHILDREN

Answers to question: "If there are children in your home, to what programs do they generally listen?" tabulated according to communities and expressed in terms of the percentage of those answering the question.

Program	Total		Minneapolis		St. Paul		Duluth		Communities		D		E		F		G		H	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Jack Armstrong	3548	51.1	2093	54.9	512	51.8	83	11.4	68	37.0	350	63.9	50	70.4	65	55.6	327	66.6		
Renfrew	2784	40.1	1726	45.3	421	42.6	27	3.7	27	14.7	286	52.2	20	28.2	51	43.6	226	46.0		
Popeye	2765	39.9	1692	44.4	403	40.8	88	12.1	57	31.0	263	48.0	27	38.0	38	32.5	197	40.1		
Tom Mix	2059	29.7	1396	36.7	483	48.9	36	4.9	31	16.8	35	6.4	2	2.8	15	12.8	61	12.4		
Gangbusters	1544	22.3	1019	26.8	201	20.3	72	9.9	20	10.9	114	20.8	11	15.5	23	19.7	84	17.1		
Orphan Annie	1871	27.0	679	17.8	254	25.7	580	79.6	124	67.4	106	19.3	23	32.4	13	11.1	92	18.7		
Buddy & Ginger	1035	14.9	557	14.6	147	14.9	242	33.2	4	2.2	19	3.5			41	35.0	25	5.1		
Lux Radio Theater	868	12.5	627	16.5	81	8.2	21	2.9	4	2.2	71	13.0	7	9.9	11	9.4	46	9.4		
Jack Benny	836	12.1	446	11.7	76	7.7	181	24.8	17	9.2	56	10.2	4	5.6	12	10.3	44	9.0		
Junior Nurse Corps	824	11.9	455	11.9	77	7.8	10	1.4	15	8.2	150	27.4	9	12.7	18	15.4	90	18.3		
Uncle Tom	792	11.4	546	14.3	238	24.1					2	.4			1	.8	5	1.0		
Wilderness Road	696	10.0	370	9.7	70	7.1	11	1.5	15	8.2	133	24.3	6	8.5	17	14.5	74	15.1		
Burns & Allen	662	9.5	455	11.7	59	6.0	2	.3	3	1.6	74	13.5	10	14.1	7	6.0	52	10.6		
Easy Aces	655	9.4	482	12.7	83	8.4	4	.5	4	2.2	43	7.8	3	4.2	14	12.0	22	4.5		
Eddie Cantor	571	8.2	327	8.6	56	5.7	4	.5	6	3.3	85	15.5	9	12.7	10	8.5	74	15.1		
First Nighter	538	7.8	315	8.3	65	6.6	123	16.9	9	4.9	17	3.1					9	1.8		
Major Bowes	529	7.6	307	8.1	65	6.6	17	2.3	14	7.6	69	12.6	6	8.5	9	7.7	42	8.6		
One Man's Family	509	7.3	199	5.2	57	5.8	222	30.5	6	3.3	19	3.5					6	1.2		
Fibber McGee	498	7.2	222	5.8	67	6.8	177	24.3	15	8.2	15	2.7					1	.8		
Fred Allen	478	6.9	320	8.4	38	3.8	55	7.5	3	1.6	26	4.7	3	4.2	8	6.8	25	5.1		

[illegible]

TABLE XV
HUSBAND

Answers to the question "The five programs that you like best (or liked best if you no longer hear them) are:" tabulated by communities and expressed in terms of the percentage of those answering the question.

Communities.

Program	Total		Minneapolis		St. Paul		Duluth		D		E		F		G		H	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Gangbusters	2350	31.6	1399	34.5	386	34.6	78	10.1	30	18.0	302	48.6	11	15.3	33	28.0	111	21.8
Major Bowes	1976	26.3	1142	28.2	329	29.5	83	10.8	47	28.1	172	27.7	15	20.8	41	34.7	127	24.9
Boake Carter	1810	24.4	1096	27.0	209	18.7	63	8.2	33	19.8	221	35.6	21	29.2	26	22.0	141	27.6
Jack Benny	1645	22.1	861	21.2	250	22.4	273	35.5	38	22.8	84	13.5	11	15.3	29	24.6	99	19.4
News	1189	16.0	622	15.3	129	11.6	130	16.9	37	22.2	107	17.2	21	29.2	24	20.3	119	23.3
Lux Radio Theater	1180	15.9	773	19.1	193	17.3	32	4.2	15	9.0	91	14.7	9	12.5	13	11.0	54	10.6
Eddie Cantor	1172	15.8	610	15.0	180	16.1	26	3.4	31	18.6	157	25.3	16	22.2	31	26.3	121	23.7
Fred Allen	1093	14.7	574	14.2	154	13.8	201	26.1	23	13.8	43	6.9	14	19.4	21	17.8	63	12.4
March of Time	1075	14.5	725	17.9	106	9.5	13	1.7	24	14.4	110	17.7	7	9.7	15	12.7	75	14.7
Sports (Games)	906	12.2	467	11.5	216	19.4	64	8.3	27	16.2	64	10.3	6	8.3	11	9.3	51	10.0
Burns & Allen	726	9.8	459	11.3	110	9.9	2	.2	9	5.4	78	12.6	12	16.7	12	10.2	44	8.6
Bing Crosby	659	8.9	351	5.1	104	9.3	138	17.9	6	3.6	19	3.1	6	8.3	10	8.5	25	4.9
Ford Hour	639	8.6	460	11.3	59	5.3	17	2.2	2	1.2	49	7.9	10	13.9	9	7.6	33	6.5
First Nighter	637	8.6	335	8.3	108	9.7	141	18.3	10	6.0	19	3.1	2	2.8	1	.8	21	4.1
Fibber McGee	631	8.5	232	5.7	130	11.6	235	30.5	1	.6	18	2.9	2	2.8	2	1.7	11	2.2

TABLE XVI
WIFE—NIGHT

Answers to the question: "The five programs that you like best (or liked best if you no longer hear them) are:" tabulated by communities and expressed in terms of the percentage of those answering the question.

Program	Communities																	
	Total		Minneapolis		St. Paul		Duluth		D		E		F		G		H	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Lux Radio Theater	2668	36.0	1670	41.1	419	39.5	78	9.4	48	28.2	256	38.8	21	44.7	31	27.9	145	30.9
Major Bowes	2121	28.6	1255	30.9	331	31.2	90	10.8	58	34.1	219	33.2	9	19.1	41	36.9	118	25.1
First Nighter	1465	19.8	754	18.6	272	25.6	304	36.6	36	21.2	42	6.4	6	12.8	3	2.7	48	10.2
Jack Benny	1330	17.9	690	17.0	202	19.0	211	25.4	36	21.2	77	11.7	7	14.9	23	20.7	84	17.9
Boake Carter	1195	16.1	763	18.8	113	10.6	40	4.8	17	10.0	144	21.9	13	27.7	15	13.5	90	19.1
One Man's Family	1167	15.7	378	9.3	165	15.5	545	65.6	24	14.1	33	5.0			6	5.4	16	3.4
Gangbusters	1165	15.7	761	18.7	190	17.9	29	3.5	18	10.6	96	14.6	5	10.6	15	13.5	51	10.9
Burns & Allen	1111	15.0	699	17.2	170	16.0	6	.7	18	10.6	120	18.2	10	21.3	24	21.6	64	13.6
Fred Allen	993	13.4	531	13.1	155	14.6	161	19.4	22	12.9	54	8.2	5	10.6	20	18.0	45	9.6
Eddie Cantor	871	11.7	439	10.8	137	12.9	17	2.0	15	8.8	132	20.0	9	19.1	28	25.2	94	20.0
Wayne King	786	10.6	388	9.5	92	8.7	85	10.2	18	10.6	103	15.6	2	4.3	7	6.3	91	19.4
March of Time	748	10.1	485	11.9	68	6.4	14	1.7	15	8.8	89	13.5	3	6.4	12	10.8	62	13.2
Bing Crosby	713	9.6	367	9.0	100	9.4	160	19.3	14	8.2	23	3.5	3	6.4	7	6.3	39	8.3
Kate Smith	708	9.6	429	10.6	91	8.6	10	1.2	16	9.4	93	14.1	9	19.1	13	11.7	47	10.0
Hollywood Hotel	704	9.5	513	12.6	72	6.8	3	.4	6	3.5	57	8.6	3	6.4	20	18.0	30	6.4
Ford Hour	696	9.4	501	12.3	83	7.8	23	2.8	2	1.1	48	7.3	2	4.3	5	4.5	32	6.8
Fibber McGee	689	9.3	269	6.6	150	14.1	239	28.8	2	1.1	17	2.6	1	2.1	2	1.8	9	1.9
News	515	6.9	301	7.4	44	4.1	47	5.7	16	9.4	50	7.6			7	6.3	50	10.6
Nelson Eddy	469	6.3	336	8.3	43	4.0	7	.8	1	.6	48	7.3			5	4.5	29	6.2
Rudy Vallee	432	5.8	193	4.7	55	5.2	154	18.5	9	5.3	8	1.2			4	3.6	9	1.9

Show Boat	421	5.7	214	5.3	65	6.1	103	12.4	5	2.9	14	2.1	2	4.3	3	2.7	15	3.2
Community Sing	413	5.6	298	7.3	48	4.5	6	.7	3	1.8	41	6.2	2	4.3	4	3.6	11	2.3
Cedric Adams	375	5.1	275	6.8	12	1.1			1	.6	66	10.0			1	.9	20	4.3
Hit Parade	363	4.9	210	5.2	56	5.3	36	4.3	4	2.4	25	3.8	7	14.9			25	5.3
General Motors	344	4.6	232	5.7	43	4.0	36	4.3	3	1.8	17	2.6	1	2.1	1	.9	11	2.3
Robert Ripley	336	4.5	137	3.4	85	8.0	86	10.3	1	.6	12	1.8			7	6.3	8	1.7
Do You Want to be an Actor	332	4.5	131	3.2	51	4.8	97	11.7	9	5.3	15	2.3	2	4.3	7	6.3	20	4.3
Easy Aces	325	4.4	212	5.2	53	5.0	1	.1	4	2.4	29	4.4	3	6.4	4	3.6	19	4.0
Pick & Pat	312	4.2	209	5.1	48	4.5			2	1.1	37	5.6	2	4.3	2	1.8	12	2.6
Cavalcade of America	151	3.7	151	3.7	30	2.8	7	.8	1	.6	30	4.6	1	2.1	2	1.8	19	4.0
Fred Astaire	121	3.0	121	3.0	26	2.4	46	5.5	3	1.8	6	.9	2	4.3	5	4.5	11	2.3
Jessica Dragonette	109	2.7	109	2.7	32	3.0	42	5.1	1	.6	11	1.7			1	.9	6	1.3
Al Jolson	99	2.4	99	2.4	19	1.8	2	.2	2	1.1	23	3.5	1	2.1	9	8.1	9	1.9
Amos & Andy	52	1.3	19	1.8	19	1.8	17	2.0	8	4.7	30	4.6	2	4.3	9	8.1	29	6.2
National Barn Dance	47	1.2	30	2.8	30	2.8	85	10.2	21	12.4	49	7.4	3	6.4	6	5.4	26	5.5
True Story	80	2.0	54	5.1	5		5	.6	5	2.9	14	2.1	1	2.1	6	5.4	15	3.2
Sports (Games)	48	1.2	44	4.1	1		1	.1	4	2.4	4	.6			1	.9	4	.8
No. answering question	7414		4064		1062		831		170		659		47		111		470	

TABLE XVIII

Answers to the question: "If there are children in your home, to what programs do they generally listen?" tabulated according to the occupation of the head of the family.

Minneapolis: Total Replies to this Question, 3809.

Program	I		II		III		V		VI		VII		
	N	%	N	%	N	%	N	%	N	%	N	%	
% of Total Replies													
Jack Armstrong	54.9	138	45.7	351	49.8	366	57.3	741	56.4	179	65.5	49	65.4
Renfrew	45.3	126	41.8	310	44.0	326	50.9	551	41.8	141	51.7	40	53.3
Popcye	44.4	114	36.4	301	42.7	289	45.2	622	47.3	134	49.2	26	34.7
Tom Mix	36.7	94	31.1	225	31.9	243	38.0	526	40.0	103	37.9	28	37.4
Gangbusters	26.8	58	19.2	184	26.1	180	28.2	367	27.9	94	34.4	19	25.4
Orphan Annie	17.8	34	11.3	80	11.3	127	19.9	256	19.5	68	24.9	26	34.7
Lux Radio Theater	16.5	57	18.9	132	18.7	62	9.7	246	18.7	44	16.1	12	16.0
Buddy & Ginger	14.6	33	10.9	77	11.1	117	18.3	215	16.4	44	16.1	10	13.3
Uncle Tom	14.3	52	17.2	96	13.6	74	11.6	185	14.1	39	14.3	10	13.3
Easy Aces	12.7	35	11.6	88	12.5	80	12.5	180	13.7	30	11.0	13	17.4
Junior Nurse Corps	11.9	28	9.2	73	10.3	75	11.7	177	13.5	32	11.7	3	4.0
Burns & Allen	11.7	48	15.9	87	12.3	80	12.5	147	11.2	21	7.7	10	13.3
Jack Benny	11.7	47	15.6	109	15.5	66	10.3	144	10.9	17	6.2	5	6.7
Wilderness Road	9.7	24	7.9	67	9.5	67	10.5	137	10.4	20	7.3	3	4.0
Eddie Cantor	8.6	35	11.6	62	8.8	53	8.3	107	8.1	24	8.8	6	8.0
Fred Allen	8.4	32	10.6	70	9.9	41	6.4	110	8.4	19	7.0	5	6.7
First Nighter	8.3	24	7.9	68	9.6	38	5.9	125	9.5	18	6.6	4	5.3
Major Bowes	8.1	20	6.6	52	7.4	58	9.1	94	7.1	27	9.9	7	9.3
Robert Ripley	5.9	27	8.9	57	8.1	28	4.4	77	5.9	14	5.1	1	1.3
Fibber McGee	5.8	19	6.3	48	6.8	30	4.7	85	6.5	8	2.9	5	6.7
Hollywood Hotel	5.3	10	3.3	46	6.5	26	4.1	74	5.6	12	4.4	3	4.0
One Man's Family	5.2	18	6.0	39	5.5	38	5.9	61	4.6	6	2.2	5	6.7
Pick & Pat	5.2	11	3.6	35	5.0	29	4.5	71	5.4	17	6.2	4	5.3
Kaltenmyer's	5.0	20	6.6	37	5.2	27	4.2	61	4.6	15	5.5	6	8.0
Joe Penner	3.8	9	3.0	27	3.8	20	3.1	58	4.4	10	3.8	2	2.7
No. answering question	302		705		639		1315		273		75		

TABLE XIX
HUSBAND

Answers to the question: "The five programs on the air that you like best (or liked best if you no longer hear them) are," tabulated according to the occupation of the head of the family.

Minneapolis: Total Replies to this Question, 4,054.

Program	I		II		III		V		VI		VII		
	Total	%	N	%	N	%	N	%	N	%	N	%	
Gangbusters	34.5	74	19.9	218	27.8	265	40.4	551	39.4	124	45.0	35	42.7
Major Bowes	28.2	92	24.8	187	23.8	215	31.5	428	30.6	97	35.1	24	29.3
Boake Carter	27.0	123	33.1	257	32.6	190	27.8	390	26.8	49	17.8	19	23.2
Jack Benny	21.2	78	20.9	213	27.1	125	18.3	311	22.1	63	22.8	7	8.5
Lux Radio Theater	19.1	57	15.3	139	17.7	138	20.3	297	21.2	54	19.6	20	24.4
March of Time	17.9	75	20.2	148	18.8	141	20.7	255	18.2	35	12.7	11	13.4
News	15.3	55	14.7	111	14.1	114	16.7	222	15.8	48	17.4	20	24.4
Eddie Cantor	15.0	40	10.8	109	13.8	104	15.2	238	17.0	42	15.2	14	17.1
Fred Allen	14.2	43	11.6	106	13.5	89	13.1	235	16.7	44	15.9	10	12.2
Burns & Allen	11.3	28	7.5	76	9.6	80	11.7	178	12.7	39	14.1	12	14.7
Ford Hour	11.3	116	31.5	152	19.3	56	8.2	106	7.6	7	2.5	1	1.2
First Nighter	8.3	28	7.5	61	7.7	53	7.8	114	8.2	25	9.1	8	9.8
Cedric Adams	8.2	23	6.2	72	9.1	66	9.7	114	8.2	23	8.3	9	11.0
Sports Review and News	7.6	32	8.6	64	8.1	58	8.5	105	7.5	23	8.3	8	9.8
Pick & Pat	6.4	8	2.2	28	3.6	51	7.5	116	8.3	30	10.9	7	8.5
Robert Ripley	6.2	25	6.7	65	8.3	34	5.0	91	6.5	21	7.6	3	3.7
Fibber McGee	5.7	19	5.1	37	4.7	33	4.8	94	6.7	18	6.5	5	6.1
Bing Crosby	5.1	26	7.0	80	10.1	57	8.4	140	10.0	28	10.1	4	4.9
General Motors	5.1	61	16.4	73	9.3	19	2.8	36	2.6	3	1.1		
Community Sing	4.9	10	2.7	32	4.1	32	4.7	87	6.2	16	5.8	7	8.5
Kate Smith	4.6	8	2.2	29	3.7	36	5.3	72	5.1	17	6.2	6	7.7
Hollywood Hotel	3.8	8	2.2	27	3.4	25	3.7	67	4.8	12	4.4	2	2.4
Amos & Andy	2.9	12	3.2	29	3.7	39	5.7	53	3.8	17	6.2	3	3.7
No. answering question		372		788		682		1401		276		82	

TABLE XX

WIFE-NIGHT

Answers to the question: "The five programs on the air that you like best (or liked best if you no longer hear them) are:" tabulated according to the occupation of the head of the family.

Minneapolis: Total Replies to this Question, 4,064.

Program	I		II		III		V		VI		VII		
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	
Lux Radio Theater	41.1	115	33.8	295	38.4	281	42.8	612	45.1	124	45.4	30	39.0
Major Bowes	30.9	80	23.8	180	23.5	216	32.8	480	35.4	109	40.0	33	41.9
Boake Carter	18.8	92	27.1	155	20.2	107	16.4	214	15.8	27	9.9	12	15.6
Gangbusters	18.7	38	11.2	93	12.1	148	22.5	283	20.9	71	26.0	18	23.4
First Nighter	18.6	45	13.2	141	18.4	119	18.1	275	20.3	60	22.0	19	24.7
Burns & Allen	17.2	35	10.3	114	14.9	119	18.1	242	17.8	56	20.5	17	22.1
Jack Benny	17.0	55	16.2	162	21.2	101	15.3	251	18.5	42	15.4	5	6.5
Fred Allen	13.1	33	9.7	104	13.6	89	13.5	193	14.2	42	15.4	7	9.1
Hollywood Hotel	12.6	24	8.1	86	11.2	83	12.6	169	12.5	41	15.0	5	6.5
Ford Hour	12.3	93	27.4	127	16.6	62	9.4	120	8.9	14	5.1	2	2.6
March of Time	11.9	56	16.5	98	12.8	88	13.4	147	11.7	17	6.2	8	10.4
Eddie Cantor	10.8	7	2.1	76	9.9	63	9.6	157	11.6	40	14.6	15	19.4
Kate Smith	10.6	15	4.4	47	6.3	74	11.2	165	12.2	44	16.1	12	15.6
Wayne King	9.5	27	7.9	82	10.7	66	10.0	137	10.1	21	7.7	1	1.3
One Man's Family	9.3	20	5.9	69	9.0	53	8.1	146	10.8	26	9.5	9	11.7
Bing Crosby	9.0	23	6.8	79	10.3	69	10.5	131	9.7	22	8.1	4	5.7
Nelson Eddy	8.3	44	12.9	95	12.4	48	7.3	79	5.8	17	6.2	1	1.3
News	7.4	30	8.8	63	8.2	56	8.5	92	6.8	15	5.5	9	11.7
Community Sing	7.3	14	4.1	41	5.3	62	9.4	103	7.6	31	11.3	14	18.2
Cedric Adams	6.8	8	2.4	51	6.7	38	5.8	94	6.9	23	8.4	10	13.0
Fibber McGee	6.6	8	2.4	41	5.3	54	8.2	95	7.0	22	8.1	7	9.1
General Motors	5.7	44	12.9	81	10.5	24	3.7	44	3.2	2	.7		
Show Boat	5.3	16	4.7	47	6.3	37	5.6	62	4.6	15	5.5	5	6.5
Easy Aces	5.2	8	2.4	32	4.2	38	5.8	79	5.8	19	7.0	3	3.9
Hit Parade	5.2	15	4.4	46	6.0	42	6.4	63	4.6	8	2.9	2	2.6
Pick & Pat	5.1	21	6.2	14	1.8	35	5.3	80	5.9	25	9.2	6	7.8
No. answering question	340		767		658		1356		273		77		

TABLE XXI

WIFE-DAY

Answers to the question: "The five programs on the air that you like best (or liked best if you no longer hear them) are;" tabulated according to the occupation of the head of the family.

Minneapolis: Total Replies to this Question, 3,788.

Program	I		II		III		V		VI		VII	
	% of Total Replies	N	%	N	%	N	%	N	%	N	%	N
Today's Children	26.6	71	23.4	120	18.1	83	12.9	466	36.0	95	35.4	14
Mary Marlin	20.6	37	12.2	126	18.9	138	21.6	303	23.4	56	20.9	17
Ma Perkins	18.6	35	11.5	97	14.6	145	22.7	246	19.0	52	19.4	19
Betty & Bob	17.7	27	8.9	78	11.7	132	20.6	245	18.9	67	25.0	29
Gene & Glenn	15.2	37	12.2	92	13.8	120	18.8	203	15.7	47	17.5	12
Vic & Sade	13.8	39	12.9	90	13.5	92	14.4	206	15.9	19	7.1	8
News	12.8	49	16.2	90	13.5	75	11.7	157	12.1	32	11.9	11
Kitty Keene	10.7	14	4.6	46	6.9	79	12.3	156	12.0	39	14.5	13
Gold Medal	10.7	37	12.2	55	8.3	70	10.9	145	11.2	38	14.2	10
O'Neill's	9.9	19	6.3	55	8.3	79	12.3	164	12.6	25	9.3	5
Myrt & Marge	8.9	15	5.0	35	5.3	47	7.3	140	10.8	41	15.3	11
Farm & Home Hour	8.6	25	8.3	73	11.0	51	8.0	113	8.7	23	8.6	2
Big Sister	8.3	14	4.6	38	5.7	56	8.8	115	8.9	32	11.9	16
Voice of Experience	6.7	9	3.0	37	5.6	54	8.4	98	7.6	20	7.5	11
Betty Crocker	6.3	19	6.3	37	5.6	38	5.9	77	5.9	15	5.6	4
School of the Air	6.2	21	6.9	50	7.5	33	5.2	89	6.9	12	4.5	2
Dayton's Musical Chimes	6.1	23	7.6	53	8.0	33	5.2	64	4.9	11	4.1	6
Slim Jim	6.0	9	3.0	20	3.0	40	6.3	82	6.3	39	14.5	13
Modern Cinderella	5.9	4	1.3	25	3.8	47	7.3	87	6.7	23	8.6	4
Mark Tyme	5.8	7	2.3	43	6.5	45	7.0	80	6.2	15	5.6	2
Gumps	5.0	6	2.0	19	2.9	43	6.7	67	5.2	23	8.6	6
Backstage Wife	4.6	5	1.6	22	3.3	34	5.3	65	5.0	14	5.2	7
Opera	4.6	37	12.2	45	6.8	25	3.9	32	2.5	3	1.1	2
Breakfast Club	4.1	23	7.6	36	5.4	18	2.8	50	3.9	2	.8	3
Ladies First	4.1	15	5.0	34	5.1	30	4.7	52	4.0	8	3.0	2
No. answering question		303		665		640		1295		268		81

Minneapolis: Total number of replies, 3787.

is in use	I	II	III	IV	V	VI	VII
21.5 and 22					1		
20.5 " 21							
19.5 " 20					1		
18.5 " 19							
17.5 " 18		2	2		2		
16.5 " 17		2	2		6	3	1
15.5 " 16	1	3	5		9	4	1
14.5 " 15	1	10	9		20	6	
13.5 " 14	5	7	13		21	7	1
12.5 " 13	2	6	7		10	1	
11.5 " 12	10	18	27	1	51	11	4
10.5 " 11		8	9	1	10	3	
9.5 " 10	10	36	47	1	79	18	4
8.5 " 9	7	39	32	1	66	11	4
7.5 " 8	25	73	86	3	136	31	13
6.5 " 7	24	66	67	2	124	21	6
5.5 " 6	40	98	110	2	257	46	17
4.5 " 5	55	124	101	1	232	43	9
3.5 " 4	57	125	93	1	192	33	10
2.5 " 3	64	88	82	2	124	30	9
1.5 " 2	52	78	42	3	88	16	3
.5 " 1	28	45	11	0	16	4	
							Total
No data	53	99	87	4	188	45	15
Mean	4.593	5.400	6.158	6.028	6.078	6.361	6.299
S.D.	3.08	3.36	3.43	3.31	3.37	3.68	3.41

TABLE XXIII

Answers to the question: "The average amount of time our radio is in use each day is ----," tabulated according to the number of children under 16 years of age in each family.

Minneapolis: Total number of replies 4276.

Number of children under 16

Hours radio is in use	None	1	2	3	4	5	6	7	8	9
21.5 and 22		1								
20.5 " 21										
19.5 " 20		1								
18.5 " 19										
17.5 " 18		1		1	2	1	1			
16.5 " 17	5	5	3	2	1	1				
15.5 " 16	9	8	2	2	3		2			
14.5 " 15	9	18	11	10	2	4			1	
13.5 " 14	9	17	20	10	6	1	1			
12.5 " 13	2	8	14	5	1					
11.5 " 12	14	50	37	15	14	6	1	1		
10.5 " 11	4	14	11	4	3	1	2			
9.5 " 10	27	65	69	30	18	4	2	2	1	
8.5 " 9	24	49	58	25	11	10	1			
7.5 " 8	59	145	110	53	23	8	7	1	1	
6.5 " 7	55	109	107	42	16	9				
5.5 " 6	93	217	176	119	35	10	4			
4.5 " 5	107	186	198	88	26	9	5	2		
3.5 " 4	132	197	160	76	24	2	3			
2.5 " 3	78	151	138	51	23	6	2		1	
1.5 " 2	77	89	104	32	14			1		1
.5 " 1	30	33	39	20	1					
No data	93	213	175	103	28	13	1	2		2
Mean	5.349	5.862	5.687	5.906	6.584	7.806	7.815	8.375	8.750	
S. D	3.43	3.41	3.30	3.36	3.77	5.05	4.10	2.17	4.55	

